

CLAIM AMENDMENTS

Please amend claims 1, 6 and 11 as indicated on the following listing of all the claims in the present application after this Amendment:

1. (currently amended) A method for adjusting a noise floor of a filtered signal for low frequencies, the method comprising:

providing a digital signal, having M bits, that has been digitally filtered, where M is a selected positive number;

forming an EXclusive OR product of N least significant ~~LSB~~ bits (LSBs) of the M-bit filtered signal, to provide a one-bit supplement signal, where N is a selected positive number satisfying $N+1 \leq M$;

adding the supplement signal to the M-bit filtered signal to produce a modified filtered signal; and

removing L LSBs ~~bits~~ from the modified filtered signal to produce a dithered, filtered signal, where L is a selected positive number satisfying $L+1 \leq M$.

2. (original) The method of claim 1, further comprising choosing said integer M = 30.

3. (original) The method of claim 1, further comprising choosing said integer N = 16.

4. (original) The method of claim 1, further comprising choosing said integer L in a range $1 \leq L \leq 16$.

5. (original) The method of claim 1, further comprising providing said filtered signal as an FIR-filtered signal.

6. (currently amended) A system for adjusting a noise floor of a filtered signal for low frequencies, the system comprising a computer that is programmed:

to provide a digital signal, having M bits, that has been digitally filtered, where M is a selected positive number;

to form an EXclusive OR product of N least significant ~~LSB~~ bits (LSBs) of the M-bit filtered signal, to provide a one-bit supplement signal, where N is a selected positive number satisfying $N+1 \leq M$;

to add the supplement signal to the M-bit filtered signal to produce a modified filtered signal; and

to remove L ~~LSBs~~ bits from the modified filtered signal to produce a dithered, filtered signal, where L is a selected positive number satisfying $L+1 \leq M$.

7. (original) The system of claim 6, wherein said computer is further programmed to choose said integer $M = 30$.

8. (original) The system of claim 6, wherein said computer is further programmed to choose said integer $N = 16$.

9. (original) The system of claim 6, wherein said computer is further programmed to choose said integer L to lie in a range $1 \leq L \leq 16$.

10. (original) The system of claim 6, wherein said computer is further programmed to provide said filtered signal as an FIR-filtered signal.

11. (currently amended) An article of manufacture comprising:
a computer usable medium having computer readable program code means embodied in the medium;

computer readable program code means for causing a computer to provide a digital signal, having M bits, that has been digitally filtered, where M is a selected positive number;

computer readable program code means for causing a computer to form an EXclusive OR product of N least significant ~~LSB~~ bits (LSBs) of the M-bit filtered signal, to provide a one-bit supplement signal, where N is a selected positive number satisfying $N+1 \leq M$;

computer readable program code means for causing a computer to add the supplement signal to the M-bit filtered signal to produce a modified filtered signal; and

computer readable program code means for causing a computer to remove L LSBs bits from the modified filtered signal to produce a dithered, filtered signal, where L is a selected positive number satisfying $L+1 \leq M$.

12. (original) The article of manufacture of claim 11, wherein at least one of said computer readable program code means chooses said integer $M = 30$.

13. (original) The article of manufacture of claim 11, wherein at least one of said computer readable program code means chooses said integer $N = 16$.

14. (original) The article of manufacture of claim 11, wherein at least one of said computer readable program code means chooses said integer L in a range $1 \leq L \leq 16$.

15. (original) The article of manufacture of claim 11, wherein at least one of said computer readable program code means provides said filtered signal as an FIR-filtered signal.